

## **Tenofovir and emtricitabin:**

**Class:** Antiretroviral Agent, Reverse Transcriptase Inhibitor (Nucleoside).

### **Indications:**

Treatment of HIV-1 infection in combination with other antiretroviral agents in adults and pediatric patients  $\geq 12$  years of age. Pre-exposure prophylaxis (PrEP) for prevention of HIV-1 infection in adults who are at high risk for acquiring HIV.

**Available dosage form in the hospital:** 300MG TAB

### **Dosage:**

**HIV-1 infection:** Oral: One tablet (emtricitabine 200 mg and tenofovir 300 mg) once daily. **Note:** Recommended as a component of preferred regimens (in combination with atazanavir/ritonavir or darunavir/ritonavir or efavirenz or raltegravir) in antiretroviral-naive patients (DHHS, 2013).

**Preexposure prophylaxis (PrEP) for prevention of HIV infection in uninfected high-risk individuals:** Oral: One tablet (emtricitabine 200 mg and tenofovir 300 mg) once daily

**Hepatitis B treatment in patients with antiviral-resistant HBV or coinfection with HIV (unlabeled use):** Oral: One tablet (emtricitabine 200 mg and tenofovir 300 mg) once daily (Lok, 2009)

**Occupational HIV postexposure, prophylaxis (PEP) (unlabeled use):** Oral: One tablet (emtricitabine 200 mg and tenofovir 300 mg) once daily for 4 weeks with concomitant raltegravir. Recommended as preferred therapy (Kuhar, 2013)

**PrEP for prevention of HIV infection in injecting drug users (IDU) who are at risk for parenteral acquisition of HIV but not at risk for sexual acquisition of HIV (unlabeled use):** Oral: One tablet (emtricitabine 200 mg and tenofovir 300 mg) once daily (CDC, 2013)

### **Renal Impairment:**

HIV-1 infection: Adults:

$Cl_{cr} \geq 50$  mL/minute: No dosage adjustment necessary

$Cl_{cr}$  30-49 mL/minute: Increase interval to every 48 hours.

$Cl_{cr} < 30$  mL/minute or hemodialysis: Not recommended.

PrEP: Adults:

$Cl_{cr} \geq 60$  mL/minute: No dosage adjustment necessary

$Cl_{cr} < 60$  mL/minute: Not recommended.

**Common side effect:**

The adverse reaction profile of combination therapy has not been established. See individual agents.

**Pregnancy Risk Factor: B**